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 Serving you on: Comp-u-serve - Delphi - GEnie
===

From the Editor's Desk:

Back in Feb. 1988, Atari got a call from the Pres. of a Usergroup, they
were supporting the SCOUT WORLD 88 SHOW at Jacksonville Naval Air Station,
May 21-22, 1988. The usergroup wanted to give Atari plenty of lead time
so no problems would be encountered. The person who took the call at
Atari assured the user group they would receive all the promotional
material possible.

Needless to say, the folks at the usergroup were overjoyed to have help
from ATARI themselves. The Pres. then called again to verify the support
in the 2nd week of May, The person who took the call, (the same one from
before), told the president of the usergroup, "I don't remember, but I
WILL get some stuff out to you right away.", OK, it's possible to forget
or misplace a small thing like the Boy Scouts of America or a Usergroup
trying to help ATARI keep up the public interest in it's products. At
least all was not lost or was it?   "Here it is Friday evening, the night
before the Show, the UPS people have passed us by" ....,He said.

MIRACLES DO HAPPEN!....The Pres. of ST. J.A.U.G. called Atari and asked
Debra Brown for Jack Tramiel, she connected him with MEL STEVENS and a
conference call was made between Mel Stevens, Augie Ligouri and
Ralph Mariano. Folks, these fellows know how to make things happen!
Could it be because all three guys were from the same neighborhood in

Brooklyn, N.Y.?? I don't know for sure, but I can say this, 150lbs of
promotional material was sent from Atlanta, by Mike Figlione who had to go
back to work after hours to take care of this, and arrived at
Jacksonville International Airport at 12:30 AM Saturday morning.

Because of the fact that the Jax folks at the airport knew about Scout
World 88, the materials for the show were delivered to the ST
J.A.U.G. representatives at 12:45 AM, shortly after arrival, even though
the freight office closed at 10pm and would not re-open till 9am.
Many thanks to Carol Kramer and William Ferrigno, (Both of Delta Airlines)
, for pitching in to help a good thing move along smoothly..

                    A BIG THANK YOU TO ATARI!!!

NOTE: There were over 100,000 people in attendance!
               ~~~~~~~~~~~~

On a more serious note, Atari has a very strange EXCHANGE POLICY in place,
if you were to have purchased an ST, ie: 1040STf with the BLIT-ROMS and
motherboard ready for the Blitter Chip REV D/E, and for some reason after
the warranty had expired, you found you needed to exchange either the
motherboard or entire unit. You would run the RISK of getting back either
a motherboard or complete unit (working) but not of the SAME VINTAGE!!!
You could very possibly get a REV A 1040 or AN ORIGINAL TYPE!

Come on Atari, Get Real!, Why would anyone want to invest in a late model
machine, send it in, to be refurbished/replaced, because of a problem and
get back a model released 2 years prior! If I bought a new ST (3-4mos.)
and needed a replacement, I would first point out that I bought the newer
one to get the BLIT ROMS and the blitter ready motherboard, and would
emphasize I wanted the same type of machine in return! Don't you agree
Mr. Atari?
                    CHANGE THAT POLICY....Please!

                    THE JUDGES LIST
                    ===============
          Service   Name

          CIS   Ron Luks
          CIS   Dan Rhea
          CIS   Mike Schoenbach
          Delphi   Clayton Walnum
          Delphi   Charles Bachand
          Delphi   Maurice Molineux
          GEnie   Darlah Hudson
          GEnie   Fred Beckman
          GEnie   Sandy Wilson

ST-Report Official Contest Rules
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No purchase necessary.

Deadline for consideration in this contest is midnight August 31, 1988.

Winners will be annouced in ST-Report on September 12, 1988. We
guarantee to award all prizes. The prize list will be announced during
the contest.

All readers are eligible to enter except employees of APEInc.
Publishing, CompuServe, GEnie, Delphi and their immediate families.

This contest void where prohibited or restricted by law. We are not
responsible for lost, mis-marked, or delayed art/work.

All submissions must be drawn with any Atari ST drawing program.

All submissions must be drawn by the original artist. Copyrighted art work
will not be accepted.

All submissions become the property of APEInc.

All submissions must be uploaded to specified BBS systems by the deadline
date. All systems have time and date stamping capability. Any entry dated
after 8/31/88 will be void from the contest.

Art Work Requirements

All art work considered for this contest must be drawn with any Atari ST
drawing program.

Any person submitting art work must leave an address, telephone number,
and drawing program used.

Artwork must contain the following:

ST-REPORT

The winning entry will be used at a later date for a newsletter or
magazine cover.

Where to Send

        All art work may be uploaded to the following systems.

                Syndicate BBS   (201) 968-8148
                Bounty ST BBS   (904) 786-4176

Entries by mail are also permitted. Be sure to use a 3.5 floppy S/S!
You may send to:

                ST-Report Logo Contest
                  Post Office Box 74
               Middlesex, New Jersey 08846-0074

  (Please include your name, address and telephone number)

Updates

This contest will update uploading areas every two weeks. Contest rules
will not be changed, but judges may be added during the run of the
contest.

Current judge listing will be published next week.

This contest commences May 2, 1988 and will end Midnight August 31, 1988.

If you have any questions, Please leave email on the services at the
following addresses:

                    CompuServe: 71777,2140
                    GEnie   :   ST-REPORT
                              :   R.KOVACS
                    DELPHI   :   RONKOVACS
                    The Source: BDG793

Rules and Regulations:

1). Use any full color program written exclusively for the ST to draw
     your own personal design of an ST-Report logo.

2). Art work ported over from any other computer is void.

3). No X-rated art work will be accepted.

4). Winners will be announced by mail, email, phone call or equivalent
     on or before September 12, 1988.

5). Judges decisions are final.

                A Brief History of WordPerfect and Atari
                ===

By Jeff Wilson, Manager, WPCorp. Atari Development

There has been a great deal of speculation and interest in what has caused
WordPerfect Corporation to take notice of the Atari ST computer, and
eventually develop software for that environment. This is a brief
description of what actually happened, as seen through the eyes of
WPCorp.'s Manager of Atari development.

Atari first approached WPCorp. about writing WordPerfect for the ST early
in 1985, before it's actual release. But, because of uncertainties in
what marketplace "niche" the ST would fill and compounded by
misunderstandings between the two companies, WPCorp. decided against
ST development at that time.

In the following year, however, the decision was made to begin
development of WordPerfect for the up-and-coming family of computers
based on the Motorola 68000. Simultaneous development of WordPerfect was
initiated on the Apple Macintosh, Commodore Amiga, and Atari ST. I was
asked to head up the Atari end of that project, because of two years
experience with WordPerfect in Apple II development, extensive

familiarity with Atari's 8-bit computers, and my position as President of the local Atari user's group.

On April 1, 1986 (ironically) WPCorp. purchased it's first Atari ST. Within a month, Jim Caldwell had been added to Atari development, and Atari's developer documentation had arrived. For the first few months, we experimented with development tools and wrote simple programs to determine how we wanted to approach the GEM environment. By summer, development on WordPerfect itself had started.

In January of 1987, WordPerfect ST was far enough along to be shown at CES in Atari's booth. Save, retrieve, macros, and editing were the only major features in place at that point, but the overall structure was ready to be built upon.

In March, a much more capable version of WordPerfect ST was displayed at West Coast Computer Faire, and a third programmer, (James Marshburn) was added to write the printer and speller utility programs.

Early in July, the coding for WordPerfect ST was complete, and the testing began. Throughout the summer, two full-time Atari testers and dozens of beta test sites in many countries used WordPerfect on every type of ST system imaginable. And, one by one, the encountered problems were eliminated from WordPerfect.

In August, Steve Reiser was transferred from IBM testing to head up the growing Atari testing group, and to prepare WordPerfect ST for release.

The first production copies of WordPerfect ST were made on October 8, 1987, and were available for the first time at the Northeastern Atari Computer Faire in Massachusetts the following day.

It was about a week later that black clouds began to appear in large numbers, as many bugs that had eluded our testing procedures began to surface.

Most of these problems were based on our lack of anticipating how WordPerfect would actually be perceived and used, or, incompatibilities between WordPerfect and GEM. We were able to fix the worst of these reported bugs fairly quickly, and so we released the first update on October 28, 1987. This update corrected many, but not all, of the problems people had encountered with WordPerfect.

Working feverishly to correct the remaining bugs (which seemed to multiply of their own accord), a second update was ready on January 8, 1988. This version was much more solid, but production was stopped due to a major bug in the spelling checker. When the speller bug was finally tracked down and corrected, production started again with the January 29 update.

Finally, WordPerfect was stable enough to use reliably. We were then able to spend time tracking down more subtle problems that had occasionally displayed themselves, and when this was completed, the April 15 update was automatically sent to all registered WordPerfect ST owners, in an attempt to erase early, buggy copies of WordPerfect from use.

If you are a registered WordPerfect ST owner, and did not receive this update, please call the toll-free customer support number to arrange shipment. Additional updates to WordPerfect ST will continue to be

available in the future.

After the release of WordPerfect for each of the 68000-based computers
(Mac, Amiga, and ST), WPCorp. began to evaluate the direction it wanted
to continue with respect to these machines. This evaluation gave rise
to a fear of WPCorp.'s pullout from the Atari community. Various
letters from Atari owners and magazine articles solidified the
continuance of WordPerfect and other future WPCorp. software in the
Atari marketplace, but the evaluation continued until very recently.

The result is finally in: WPCorp. has streamlined the current 68000
development groups, in favor of unifying development efforts.
Short-term development projects will probably be delayed somewhat, but
the net result to the Atari market will be more software, and of a higher
quality than could have otherwise been provided.

James Marshburn, Steve Reiser, and myself continue as the Atari
development team for WPCorp. after the restructuring. Rest assured, we
will continue to provide the highest quality of software and support we
are able to accomplish. We want to thank the Atari community for the
support they have given us, particulary the patience they have shown us
since last October.

                    May Atari live long, and prosper!

                     WORD PERFECT REVISITED
                     ======================

BY T."Rex" Reade

First of three Articles

After all the smoke cleared, and the echos of all the screaming has
subsided, what do we see?

Word Perfect for the Atari ST is in our opinion, a SUPERB word processing
package. Although there are those who are beating this issue to death.
We at ST REPORT feel the users need an in depth view of WORD PERFECT from
not only the keyboard but also from the programming and development end.
We will attempt to give an overview of the development of the program and
the very serious continuing efforts to insure it's perfection.

It is almost impossible to list the long distance calls and interviews
needed for this article however, a decent estimate would be over 50 hours
have been invested in making sure you (the user) get the best possible and
most accurate description and accounting of what is actually required to
bring forth a program having the extraordinary POWER and flexibility that
WORD PERFECT has to offer. It is difficult at best to understand why so
many of the Hard Copy magazines still see fit to devote the time and space
to further commentary about the early releases, we had our say about those
releases and have moved on to the more recent April 15, release. By the
way, The copy I used is bought and paid for by yours truly....I did not
get any freebies as an inducement to write a favorable review. Besides,
this series of articles will be much more than a simple review, you might
even call it "a recording of the course of current events" as seen by
someone who will say it like it is.....

To begin,.....After the release of ST Report # 27, the hulabaloo was
something to remember. After all, it was generated by what I call the
"smoking gun" statement about an alledged pullout by WP. Of course as we
all know, this is not quite what WP was trying to say but, the way it
came out more or less read the way we all saw it. At this time
we KNOW that WORD PERFECT IS NOT PULLING OUT. In fact, they have begun
pursuing the addition of other programs from the WP offerings.

Jeff Wilson and Steve Reiser have to be highly commended for their efforts
and especially for their patience in dealing with the ordeals of an early
program release. These two gents have done more in the area of
public relations than most others in the industry that I have spent time
observing. Without a doubt, WORD PERFECT will bend over backwards to
satisfy a customer. Believe me, WP's customer service policy coupled with
a positive outlook towards the Atari userbase is the SECRET to WP's
success in turning a potentially poor situation into what could easily be
described as a sure fire method of successful customer relations and
marketing. (Atari, Take Notes)

The program itself was, as Mr. Wilson put it, "a task akin to re-inventing
the wheel", due to many problems encountered with the OS Atari ST uses.
It's sad indeed when one calls the Atari developer assistance and a
VERY able developer tells Atari, "We found a bug in the OS (your) code"
and the reply the developer gets is, "SO, Write around it"! Essentially,
this is exactly what the FIRST CLASS developers are doing, it makes their
task 10 times as difficult, but they are doing just that...WRITING AROUND
THE BUGS IN TOS TO PRODUCE TOP QUALITY PROGRAMMING.

Word Perfect has become an Industry Leader as a result of their monumental
success in bringing a high quality program to the ST userbase. In fact,
if anyone hasn't noticed yet, WORD PERFECT for the ST is, without a doubt,
the STANDARD by which all future WP programs will evolve.

Many users may say, "I don't need such an elaborate word processor", in
reply, it must be pointed out that you may not think you need it but, you
owe it to yourself to find a way to see this program in action,after
seeing the "WSYSIWYG" and the ease of operation, you will be hard
pressed not to buzz right out and get a copy. Word Perfect is the best
available for the Atari ST.

Word Perfect Corp. has acknowledged that the original impression percieved
by their marketing analysis was somewhat erroneous, they now see the ST
Userbase as a serious entity wanting to enjoy the benefits of first class
full function business software and as such, will be releasing companion
programs for word perfect in the near future. Although there has been
some reorganization at the ST, MAC and AMIGA levels, the total effect will
be a "new look and feel" to WP releases. Expect the programs to resemble
the MAC format and have TOTAL KEYSTROKE COMPATABILITY.

WORD PERFECT ONLINE
Msg# :1118 Lines: 19 Read:39
Sent : May 18, 1988 at 6:23 PM
To   : STEVE REISER
From : MOBILE
Subj : Re: <1117> Conferencing

Hi Steve and Jeff.......

I want to thank you for spending some time with us and also the couple
of conferences you were on with the commercial services. I watched some
of the Gribnif (Neodesk) conference last night on Delphi...There were 3
guys from the company Dan & Mike and Rick....I think Rick needs to take
lessons from you folks on how to handle the questions and answers, if he
did't like a question it was generally thrown back in the person's face.
Would you believe that the 2 questioners were Lloyd Pulley and Charles
Johnson?....They are not the "average" ST user in the least. I think
Gribnif would have benefited GREATER if they had read through the message
bases in the ST Forum to really see an "above average" discussion of the
product.

Now that Word Perfect is going great guns, I have heard about the SCHOOL
discount, how about a MILITARY discount, lots of military members in our
user group here in Jacksonville, called, ST J.A.U.G., thanks.

                        Take care,

                        Mobile

Hardware Review

                    REVIEW: HEATH H-386 KIT COMPUTER
                    ===============================

Copyright 1988 Dawn Gordon

     If the idea of saving a substantial amount of money, and at the same
time gaining a great deal of knowledge about how computers are put
together intrigues you, then you might want to consider building your
own computer.

MODULAR CONSTRUCTION

     The home computer kit is not exactly a new concept. Heath Company,
the well-known entity in the electronics kit arena has been in the
do-it-yourself business for 40 years. What is a new idea, however, is
the recent trend toward modular computer kit construction. Gone are the
laborious days of work; gone are the special chip handling tools; and
most importantly, no more soldering iron burns. As a matter of fact,
all you need to build your own computer are two screwdrivers
(a flat blade type and a phillips), and a couple of hours of your time.
It's so popular that Heath is currently shipping over 220 mail-order IBM
PC compatible computer kits per month.

     My curiosity, combined with my need for a new computer at an
affordable price was enough reason to give the kit approach some serious
thought. A few weeks later a Heathkit H-386 IBM PC AT compatible
computer arrived at my door.

PUTTING IT TOGETHER

     After carefully unpacking all the parts to my computer (54 parts, 82
screws, nuts and bolts, DOS, diagnostics, video diskettes, and an
integrated software package) I quickly learned that my machine was, in

reality, just an unassembled computer. Basically, the Heath H-386 is a Zenith Data Systems top-of-the-line 386 computer that was never put together. It wasn't much of a surprise at all considering that The Heath Company is a wholly-owned subsidiary of Zenith Electronics Corporation, a respected name in the computer industry. The price difference between the Zenith Data Systems Z-386 ($6,499) complete with a 40 Megabyte fixed disk drive), and the Heath H-386 ($3,349) plus additional Fixed Disk Upgrade Kit ($1,699) was $1,415. I could have saved another $1,000 by opting for a third party fixed disk drive, but I selected the upgrade kit for convenience sake.

     Armed with this information I was relaxed and ready to assemble my computer. At the start, to get the builder into the mood, a small flyer prompted me to put the instruction booklet together. This simply required two plastic screws, a plastic binder, and the pages themselves.

     The rest of the process was really just as easy. Detailed diagrams and the written word guided me through each and every step, the first of which was sticking self-adhesive cork feet to the metal chassis bottom. The next step involved installing the power supply, which took only a few minutes. Next was the installation of the backplane board (the part that holds all the memory cards, and the basic guts of the machine itself), which required 10 screws. I then inserted the lithium backup battery into its plastic holder on the backplane board. Installation of the circulation fan followed, and everything was fairly straightforward at this point.

     The next operation was to install the speaker, and then the computer's lock system. The speaker was very easy to install, but I needed the aid of my husband, ala four hands, and the help of the Heath Technical Assistance telephone line to get the lock and its corresponding wires into place.

     At this point I was ready to install the supplied 1.2 megabyte floppy drive, and the 40 megabyte fixed disk drive, which was quick and painless.

     The next step was the easiest, but also potentially the most critical. Installing the circuit boards requires some care, as any static charge can damage the sensitive silicon chips. I made sure I was free of static by touching a separate metal picture frame from time to time. I plugged in the disk controller board, then the I/O board (which contains the serial and parallel adapters), the CPU board, which houses the main brain of the computer, and then the 1 megabyte memory board. Finally, I snapped the EGA/VGA compatible video board into place. After making sure all the boards were seated properly I secured them with six screws to the backplane board, and connected the disk drive cables to the drive controller board.

     I was now ready to close the computer, which required sliding the metal lid into place, and securing it with six screws. I then connected the keyboard, attached my Amdek 732 color monitor, and I was finished building my PC.

CHECKING IT OUT

     Five hours had elapsed from the time the shipping carton was opened to the moment the cover was closed on my new computer. I then ran the diagnostic tests, and set up the fixed disk drive. I flipped the power switch to on, and the Heath H-386 sprang to life. After installing QuarterDeck's DesqView windowing software on my new machine I will be

able, with the help of the super-fast 80386 chip, to run multiple
application programs simultaneously.

     All in all, building my own computer was a very worthwhile,
uncomplicated and enjoyable experience. Anyone can build a Heath
computer kit. All you need is a little time, patience, and the ability
to say no to dinner even if it's getting cold.

          For more information on Heath products contact:

                         Heath Company
                         P.O Box 1288
                  Benton Harbor, Michigan 49022
                       (616) 982-3411

                    PRODUCT ANNOUNCEMENT

          VIDEOKEY, THE RGB - COMPOSITE ENCODER

                  FROM PRACTICAL SOLUTIONS

Many ST users have been using the great animation software that is now
available for the ST. Most of them want to videotape the output, so that
they can show their masterpieces to their friends without ST's, or for
professional uses. Only problem is that most of the software requires
1 meg to run, thus most users have a 1040 or Mega. Since both of those
computers don't have composite video or RF, they have found themselves
in a bind....

Enter VideoKey:

The VideoKey converts the RGB output of the ST into color composite video.
We have put a lot of effort into making the colors brillant and true, the
picture excellent in low resolution. You now have the ability to record
the fantastic graphics of the ST.

The VideoKey has several nice features as well:

1.   The exclusive Colorlock(tm) circuitry locks the color burst to the
ST's system timing with no modification needed to the ST, so that there
is no color flickering or crawl on sharp vertical edges.

2.   The Auto power circuit detects when the ST is on, and in color mode,
and powers up the VideoKey as needed. No power supply required!

3.   A 13 pin din socket is supplied (just like the monitor port
on the ST) so that a RGB monitor can be connected to the VideoKey
at the same time. Perfect for doing all of your work on the RGB
monitor, and viewing the composite monitor or TV for final
product! In addition, VideoKey is compatable with Monitor Master,
our monitor switchbox. You can still switch between your monitors
with ease.

VideoKey is compatable with all low resolution software, and comes
with a limited 12 month warranty.

Note: Because of the ST's design, and the nature of composite video, the
VideoKey has been optimized for low resolution. The technical details are
too extensive to go into here, but rest assured that high quality 80
column color graphics on the ST are nearly impossible. You can view
medium resolution with the VideoKey, but any characters displayed are
hard to read. We will offer a monochrome 80 column upgrade to the
VideoKey in the near future. To enable (limited) 80 column viewing the
low resolution color would suffer tremendously, and we (and you) wouldn't
want that! We have found it not to be a problem, as most people want the
videoKey to view/record low resolution graphics, and it does a great job
with that.

The VideoKey Has been designed to videotape well, and has NTSC
(RS-170A) standard luma and chroma levels.

Call Practical Solutions, or write for further details:

Practical Solutions
1930 E. Grant Rd.
Tucson Az, 85719
(602) 884-9612

A note from the author :
     To all of the folks on our waiting list:
We have not forgotten about you, you are first in line. We just
got the flyers back from the printers, you will be notified soon.
This product has a lot of demand, and we will do our best to make
everyone happy. Thanks _a bunch_ for your support and patience.
Please give us a call if your would like to order, if you haven't already.

Mark Sloatman 74206,356

                       PUBLIC DOMAIN SHELF
                       ===================

by Alice Amore

      PROGRAMS FOR CHILDREN, Part 1: The Programs of D.A. Brumleve

     I'm surprised there aren't more public domain programs for children
than there are. The only explanation I can come up with is that most
people aren't too comfortable letting small children near their
computers. That's understandable, but it would seem to me that with the
proper supervision, there's every reason to believe that a child could
have a beautiful relationship with an ST starting at a very early age.
You will have to put as much effort into it as the child does, but it
will be well worth it. My own children, who are about to start college,
started their computer experience on a second hand 400 with 8K and a
Star Raiders cartridge. I wish they'd had something a little less
frantic, and a little more cerebral.

     D.A. Brumleve seems to have cornered the market on public domain
kiddieware. His/her programs are as much educational as they are fun,
and fun is an important ingredient in programs designed for use by
children. Most were written in GFA BASIC (MichTron). Brumleve points

out that several commands ("most notably: Draw To, Sget/Sput, Bget/Bput, Alert, and Fileselect") are not available in ST BASIC, and were needed to write these programs. These programs have crisp, bright colors and respond quickly to input. You will notice that there is always a DEGAS/NEO picture file included. These pic files are the starting points for the programs. Brumleve credits Jim Luczak's excellent program PIC_CLIP for allowing him to clip out portions of his picture files in order to import them into his GFA BASIC programs.

     On to the programs. Filenames are given instead of full names.

-KIDMUSIC is a simple idea presented in a logical, colorful way. Picture icons take the place of a menu. The child clicks the mouse on a picture, and a tune plays. There are eight picture/tunes to choose from such as "Rockabye Baby", "Old MacDonald", "Row, Row, Row Your Boat", "I'm A Little Teapot", and so forth. It would help if the adults sang along so that the toddler could learn the words. After that, the kiddies will do well on their own.

-KIDPOTAT is a variation on Mr. Potato Head. For the very young, it lets the child choose the potato's eyes, nose, mouth, hat, bowtie, and shoes, and includes a matching game where the child must click on icons to match a random potato.

-KIDNOTES gives children the opportunity to play familiar tunes on a piano keyboard with a lot of coaching. Ten tunes are available by clicking on colorful icons. Below is a piano keyboard. Each note appears as a piano key highlighted in red, and the child must click on the piano key to hear the note. This makes for some unusual timing, since the notes tend to be clicked evenly and all rhythm flies out the window. Nevertheless, this is an excellent tool for the musically inclined child who will absorb quite a bit of information about the intervals between notes of the scale. Those who have a good ear will quickly learn to anticipate the next key before it is highlighted.

-KIDPIANO is the next step after KIDNOTES. There are two icons in this one: a piano and an organ. Click on either one. At the bottom of the screen is a three-octave keyboard with all notes identified. You can now click on any key and hear your piano/organ play the key. This may seem like mild stuff when there are other PD programs available which play three voices at once, but remember that simplicity has great teaching value.

-KIDGRAPH consists of a 19 x 28 grid of squares. These squares can be highlighted either one at a time with the left mouse button, or in "flow" mode by clicking on the right mouse button. The color for highlighting can be chosen by clicking on one of many colored squares. To erase a square, simply click on the white square and then on the square to be erased. Simple! Three pre-drawn pictures are included: a family, a house with an apple tree, and a pic of miscellaneous shapes.

-KIDGRID2 continues where KIDGRAPH left off. Instead of simple squares, we now have larger squares intersected by diagonal lines. These triangles can be used to make pictures or patterns, some of them very interesting. As with KIDGRAPH, you can save and load your own creations. Three are included: man with dog, house with tree, and letter with numbers. If you stick with making patterns out of the pretty colors, you could design a Navajo rug or a patchwork quilt with this one! Not only that, but an older child could be introduced to geometry by showing her/him the way in which geometric shapes fit together to form

other geometric shapes.

-KIDPUZZL continues with the grid idea, but is somewhat harder to use.
The grid has "secret squares" planted here and there. By clicking on a
secret square, all squares assigned a specific color will appear
revealing a portion of the total picture. Six pictures are available:
a clown, baby blocks, a meal, numbers, furniture, and a house.

-KIDSKETC is the first of two programs emulating a fixture of childhood,
the Etch-A-Sketch. Real Etch-A-Sketches have a major disadvantage –
you can't save your pictures without meanwhile rendering the toy useless.
KIDSKETC lets you load and save picture after picture. This earlier
version of the program is still floating around the PD community, but
has been updated to KIDSKET2, explained below.

-KIDSKET2 is very detailed, and includes a sample picture to let you
see the possibilities. All pictures can be saved and reloaded. The
mouse is not used on the Etch-A-Sketch screen itself, but rather on a
row of arrows under the sketcher. On a real Etch-A-Sketch, it takes a
great deal of coordination to draw a diagonal line, but this program has
the problem solved by letting you click on a diagonal arrow to draw a
diagonal line. Four arrows control your diagonal direction, while
another four arrows control left, right, up, and down. You can draw a
single dot by clicking on the left mouse button, or a solid line by
clicking on the right mouse button. There is also an "erase
line" feature, and the ability to turn the sound on and off. The HELP
KEY gives you all the information you need to plunge right in.

-KIDMIXUP contains eleven scenarios which the child must arrange in the
proper order to create a logical story. Children will have to be helped
with this program at first, but will soon learn to manage it very well.
Click on one of the eleven pictures at the top of the screen. Four
pictures will then appear, and it will be the child's job to arrange
them in the proper sequence. This is accomplished by clicking on them
in the right order, at which point they will be moved below and displayed
in a row. Some of the sequences involve a chick hatching from a shell,
a snowman being built and then melting, a growing tree, and a clown
putting on his makeup. Make sure you follow the DOC file when setting up
this program. All support files must be in a folder named KIDMIXUP.FLD,
but the program itself must be on the root directory.

-KIDSONG is everyone's favorite. It takes the old camp song, "Makin'
Aiken" and turns it into a visual delight for children. First the song
is introduced while the words (each syllable highlighted) appear on the
screen. Aiken's body is made up of eight parts, all of them food, and
most of them fruits or vegetables. Each part is chosen from a group of
three similar parts, and as each part is added, the verse is played
again. Everyone sings. A typical verse might go like this: "There was
a man lived in the moon, and his name was Aiken Drum. His eyes were made
of blueberries and his name was Aiken Drum". Not only do children love
this program, but I've seen some adults get pretty involved with it
while sober.

     Some of the above programs will run from folders, other won't.
Be sure to try running them several different ways before assuming that
you've got a damaged file on your hands. If the files aren't in the
right place, you'll get a nasty error message. All of them run in low
res only, and if you mistakenly boot in med res, you are given a dialog
box to remind you to switch. Our thanks to D.A. Brumleve for giving us
so many worthwhile PD programs for the little ones.

                          NO COST PROJECT
                          ===============

By Bob Rosendale

   For awhile, about every computer magazine had some kind of computer
project, either to assemble from a parts list provided or, required some
knowledge of electronics or sheet metal work to accomplish. I normally
ignore projects when it comes to computing, even if computer software is
provided to complete the project.

   In my NO COST PROJECT there is no building, no advanced electronics
theory, and it will work on ANY, I repeat ANY computer, But since most
readers of ST Report own Atari ST computers it will make owners of other
brands envious that they had not thought of it first.

  System Requirements:
                  A ST computer (520ST, 520STFM, 1040ST) or anything new
                  that Atari comes up with between now and when you are
                  completely satisfied with how your NO COST PROJECT is
                  progressing.

Memory Requirements:
                  It does not matter, NO COST PROJECT only concerns itself
                  with the amount of storage availability. If you have
                  either an internal or external single sided drive OR if
                  you later upgrade to a CD-Player/Recorder, NO COST PROJECT
                  will remain completely compatible!

So far only hardware has been mentioned and we are about ready for the FUN
part of NO COST PROJECT, the software! Have you been wondering what to do
with all those demo files, sound files, picture files (except nudes, it
seems NASA, Nature or Cartoons work significantly better with NO COST
PROJECT.

Research and Development:

So far you have spent absolutely nothing in planning NO COST PROJECT, but
R & D is the next and most crucial step to put the project into action and
even though there maybe some telecommunications requirements and even some
vehicular logistics planning (some will find that they will NOT have to
transverse more than 27.2 miles) making fuel costs minimal.

Manpower:

You may want to try this out yourself but the big payoff will be after
finding how rewarding NO COST PROJECT is, you will want to include other
members of your local user group or even start a NO COST PROJECT Committee
within your user group for further projects!

NO COST PROJECT

Guide

1. Contact the Activities Director of a local Nursing Home, most will
find that there are more than you realized in you area. Explain to the
Activities Director that you are involved with a computer user group and
were wondering if the residents would be interested in having a
demonstration of what computers can do. Demos, Pics (most residents are
uncomfortable with nude pictures so don't bring them along), Digitized
sounds, Music players make for a wide variety since some residents have
either sight or hearing limitations. Most nursing homes have a "common"
area for their activities or even the dining area would be suitable.

2. Scheduling a date and time suitable for your demonstation will
basically will be up to the Activities Director, but since you are
volunteering your time they will work with you. Visitor hours vary but
standard hours are from 8am to 8pm, but mid mornings or mid afternoons
will generally work out the best. As for a day of the week, any day is
fine but most Directors are off on Saturdays and Sundays, so if NO COST
PROJECT becomes a monthly project you may want to try a weekend when some
of the families come to visit so that the residents can show off what they
have been learning about computers.

3. While your are setting up or have gotten set up make contact with each
resident that will be participating, most residents that participate love
hand shakes and lots of SMILES.

4. Plan your visit to last about an hour, but if you get lots of
participation let it continue as long as time permits. For example
you may want to have a list of your music files and offer to them the
choice of what they would like to hear. If you have sound files, make it
a guessing game. The most important thing is that THEY and YOU are having
fun. You may want to take your drawing program and your music program
along because the question I hear the most is: "How did you do that?".

5. Thank everyone that participated, even the Activities Director and see
how quickly you will be invited back!

If you use NO COST PROJECT wait till you are all packed up and loaded back
in your car and driving away from the nusing home, your heart will tell
you that you DID GOOD.

Let me know if you utilize NO COST PROJECT and I will let other ST Report
readers know how it went. If you or your user group participate in
community projects let me know.

                        ST REPORT CONFIDENTIAL
                        ======================

Texas: 18 Mega ST units for a school...D.O.A. European power supplies made
       sure these units wouldn't work, they were installed in a music
       (midi) and studio graphics school.

Texas: Seems Federated is at it already, a report has filtered in that a
       local dealer went in and shopped for a 1040ST...the price he got
       was 57.49 below his COST.

Calif: A prominent software house has been making quiet preparations to
       re-enter the Atari ST arena..,seems there are really more than just

200,000 STs in use today in the USA and they know it!

Penna: A number of mail order houses of high quality have banded together
        and are contemplating a suit and release of statistics of total
        sales ....Guess they are going to show all about how many machines
        Atari really has in the U.S.A.

****   A number of software developers have banded together and plan on
        adding more to their ranks in a Software Developer's Association...
        Seems they want a little more leverage in dealing with
        Atari....looks like the users are not the only ones unhappy.

**** Hats off to G.M.,... I'll bet Jack just loved that letter! ....
     caused a few programmers to pay some real attention....for a change.

                        CD-ROM Report
                        =============

Article One [Breakthrough Pricing for CD-ROM]

DUBLIN, Ohio -- Discovery Systems announced today a major pricing
breakthrough for the CD-ROM marketplace. Effectively immediately,
Discovery Systems is offering mastering services for only $1500 and disc
replication at only $2.00 per disc. This price includes High Sierra,
ISO 9660 or Apple HFS formatting at no additional cost.

    The last several months have seen increasing momentum in the CD-ROM
industry, spurred by Apple Computers' decision to manufacture its own
CD-ROM drive and Tandy Corporation's commitment to selling CD-ROM drives
through its retail distribution network. As an organization committed
to the growth of CD-ROM, Discovery Systems made a decision to change its
pricing to support this growing momentum.

    An established, volume producer of CD-ROM discs, Discovery Systems
offers American-based facilities that were specifically designed for
CD-ROM production. Its plant has been manufacturing CD-ROM discs, in
volume, for over a year.

    Discovery Systems is a full-service optical disc manufacturer with
extensive audio-visual production and data preparation facilities.
it provides software tools (proprietary and those of other companies)
development assistance, data preparation, premastering, manufacturing and
distribution services to developers of products distributed on optical
media.

                    Optical Storage with CD-ROM Drive

Seattle, Washington. March 1, 1988. Apple Computer, Inc. today embraced
optical storage technology by announcing AppleCD SC(TM), a compact disk,
read-only memory (CD-ROM) drive to be with individual Macintosh(R) and
Apple(R) II computers or shared by users connected to the AppleShare File
Server.

Apple announced the drive today at the opening of the Microsoft CD-ROM

Conference, a gathering of existing and potential publishers of CD-ROM discs and others interested in the emerging CD-ROM industry.

In addition to being one of the first personal computer manufacturers to make a CD-ROM drive available through retail stores, Apple also is launching extensive efforts aimed at the third party development community to stimulate a wide array of CD-ROM discs.

CD-ROMs can store the resources of a small library--providing users access to vast quantities of pre-recorded information--including text, digitized images and sounds such as voice and music. A single 12-cm. disk holds as much as 700 (800 kilobyte) Macintosh floppy diskettes, well over 550 megabytes, or about 270,000 pages of typewritten text.

To date, publishers have used the extraordinary capacity of CD-ROMs primarily for text and number-oriented reference materials such as encyclopedias, catalogs and specialized databases of medical, legal and financial information. These products have been available largely through value-added resellers that serve specific vertical markets. By making a CD-ROM drive readily available through retail and other sales channels, and by providing extensive support for developers, Apple expects to stimulate development of a much wider variety of CD-ROM products that take advantage of the graphics and sound capabilities of its Macintosh and Apple IIGS(R) computers and can be used as well with the Apple II.

"CD-ROM is a logical extension of Apple's unique computing platform," said Jean-Louis Gassee, senior vice president of research and development. "One by one we have added capabilities that help people deal meaningfully with information: copy-and-paste simplicity, graphics, sound, processing power, systems integration and finally, in HyperCard(TM), a radically different way of organizing and navigating through information. CD-ROM complements all of Apple's other strengths by providing a cost-effective and convenient delivery system for vast amounts and varieties of information. It's reasonable to expect that publishers will use the tools we've provided to build a completely new genre of information retrieval products.

"The arrival of an Apple CD-ROM drive is significant in other respects, too," Gassee continued. "An installed base the size of Apple's gives publishers the pool of potential customers they've been waiting for, while its retail, education and corporate sales channels provide an efficient way to get products to those customers."

CD-ROM applications in many markets

"We already are seeing exciting examples of the rich learning environments that can be created with CD-ROM databases that incorporate text, images and sound," Gassee said, referring to several projects underway at major U.S. universities that bring together instructional curricula with research materials. For example, Boston University and Harvard University are collaborating on the "Perseus Project," which is integrating more than 100 megabytes of text with 10,000 images that pertain to the history, political science, languages, art and philosophy of ancient and classical Greece.

University of Southern California's "Project Jefferson," which combines online retrieval, hypermedia and curriculum development within an integrated software package based on the U.S. Constitution, and Brown University's "Intermedia" project, a multiuser workstation environment for scholars and researchers, are two other examples of sophisticated

information retrieval systems that utilize CD-ROMs. Educators of younger
students also are using encyclopedia and other reference works on CD-ROM
as well as developing multimedia databases.

Currently available discs, for the AppleCD SC, outside of education, are
designed for specific professions. These include "Kwikee INHOUSE," a
graphics service for advertising layouts (Multi-Ad Services, Peoria, IL);
a medical database, "MEDLINE(TM) Knowledge Finder(TM)," (Aries Systems
Corporation, North Andover, MA); "Real-Scan(TM)" real estate management
system (LaserScan Systems, Miami, FL); and "Books in Print Plus" (Bowker
Electronic Publishing, New York), which is used in libraries as well as
bookstores.

The legal and healthcare markets are especially well-suited for CD-ROMs.
Their reference materials often are published without cumulative indices,
which makes manual data searches very cumbersome. Relational databases
published on CD-ROM discs would provide many of the benefits of on-line
information services, such as enabling users to search by key words,
without costly communications charges.

Apple also expects corporations to become significant users of CD-ROMs
for in-house publishing of manuals, catalogs and corporate databases; to
distribute reference materials (such as parts lists in the automotive
industry) and "boilerplate" documents (in insurance, for example); and
courseware and tutorials in industrial training applications. Federal,
state and local governments also could use CD-ROMs for storing and
copying forms on demand, for easy access to government policies and
regulations, to store training manuals and to distribute materials that
are frequently quoted or incorporated into documents, such as military
parts specifications, building codes, health and safety ordinances, etc.

CD-ROM titles for consumers are likely to serve home educational needs
(encyclopedias, atlases and other reference books), sound studios and
musicians (sound and special effects libraries for creating synthesized
music, for example) or work at home (word processing software and writers
reference tools, for example).

Apple facilitating CD-ROM publishing

To expedite development of CD-ROM titles in all of these markets, Apple
has designed its drive to be compatible with the International Standards
Organization's standard file format commonly known as "High Sierra."
While Macintosh and Apple II file support will be available when drives
are first shipped to customers, ISO/High Sierra support will become
available in early summer. Customers who purchase drives before this
time will receive a software upgrade free of charge.

In addition, Apple is providing extensive support to potential
publishers. Some 500 developers are scheduled to attend an Apple CD-ROM
Development Conference that is being held here on March 4 in conjunction
with the Microsoft conference. Speakers representing Apple and current
CD-ROM publishers will discuss topics such as hardware and software
tools, data preparation and designing the human interface.

Apple also plans to support developers by offering a starter kit that
will give them a cost-effective way of quickly developing prototye CD-ROM
discs. Specific elements of the starter kit --to hardware, software and
coupons for converting hard disk data to a CD-ROM disc--will be announced
to developers before the AppleCD SC ships in mid-May.

At the conference and as an on-going service to interested developers, Apple will demonstrate how its HyperCard software can be used as part of Macintosh CD-ROM disc. HyperCard lets users easily navigate through large quantities of data by association and context, rather than simply by hierarchical indexes. HyperCard provides developers with alternative to programming with the Macintosh interface. And just as the Macintosh development environment provides a consistent graphic interface with icons and windows, HyperCard provides consistent elements such as cards, buttons and stacks that can be used across applications. Users do not have to learn new command schemes with each new disk they acquire.

HyperCard also is an open-ended development environment that can be customized for particular projects. For example, teams on both the Perseus and Jefferson projects have used the extension capabilities of HyperCard, adding functions which are important for searching very large relational databases. Apple's technical staff will work closely with publishers in augmenting HyperCard functions.

AppleCD SC is fast and versatile

The AppleCD SC drive, which will be available in the United States in the beginning of May for a suggested retail price of $1,199 (U.S.), features a 64-Kilobyte (K) memory buffer and Small Computer Systems Interface (SCSI) that enable it to transfer data more quickly, and an audio chip set and "desk accessory" software that let it play audio CD tracks on CD-ROM as well as commercial audio compact discs. The drive includes a headphone jack, two RCA audio jacks for external speakers and amplifiers and a universal power supply that makes it compatible with electrical standards around the world. By early fall, Apple will ship the AppleCD SC in six language versions-- Kanji (Japan), British, French Canadian, German, French, Dutch, Swedish and Italian.

Discs are loaded in the AppleCD SC drive through a slot on the front of the drive. Prior to loading, discs are placed in an Apple CD Caddy--a sturdy plastic case that protects the disc and offers convenient storage for the user. The CD caddy will be available in five pack bundles. Front access allows the drive to be stored above or below the computer without taking up additional desk space.   The AppleCD SC has the same "footprint" as Apple's other SCSI storage products, which lets it be easily stacked with those devices.

The AppleCD SC plugs directly into the SCSI port of Macintosh Plus, SE and II computers. With Apple IIe and IIGS, an upgraded version of the Apple SCSI Card (Rev. C), is available today for a suggested retail price of $299 is required. The drive can be daisy-chained to as many as six other SCSI peripherals.

In addition, both Macintosh and Apple II users can share information and lower the cost of the AppleCD SC per user by connecting to an AppleShare File Server (version 2.0). Plans to for A/UX, Apple's implementation of the UNIX operating system for the Macintosh II, to support the AppleCD SC also are underway.

The drive comes with an accessory kit that contains an Apple CD Caddy, software drivers, Apple CD Remote Desk Accessory software--which controls functions needed to play audio CDs; and an owner's manual.

Apple, the Apple logo, AppleShare, Apple IIGS and Macintosh are registered trademarks of Apple Computer, Inc.
AppleCD SC and HyperCard are trademarks of Apple Computer, Inc.

Recap of the April Meeting
Federal Government Special Interest Group
on CDROM Applications and Technology
("SIGCAT")

US Geological Survey offices, Reston, Va

April 6, 1988 12:00noon

By: Jack Ryan, Manager, CDROM Sales
          Discovery Systems
             [76164,1273]

The April meeting was a return to the normal format for the
monthly SIGCAT meeting. In the closed, government employees only
session Dr. Elliot Sigel, Asst Director for Planning and
Evaluation, National Library of Medicine and Gary McCone, Chief,
Database Administration, National Agricultural Library, discussed
their efforts relative to placing their MEDLINE and AGRICOLA
databases on CDROM.

The public portion of the meeting was opened by Gerry McFaul with
a discussion of the Microsoft Conference held the first week of
March in Seattle. Some of the significant announcements in
Seattle included Apple's entry into the hardware market, the sup-
port of the ISO 9660 standard, Microsoft Extensions V2.0 and the
continuation by Microsoft of providing low cost CDROM applica-
tions (its announcement of Small Business Consultant - $149.00
and Statpak $125.00).

Michael Selnick, United States Postal Service

The first speaker was Michael Selnick from the United States
Postal Service. He discussed the first production implementation
of CDROM by a Federal entity. Consisting of 438 workstations at
approximately 200 regional centers, the project replaced an equal
number of online mainframe terminals and the national telecom-
munications network that supported them. The database consists
of 29 million Zip + 4 records compressed from 109 million address
records and receives 25,000 inquiries per day.

In 1985 the USPS released a request for proposal to update the
existing online system. No restrictions were made on the tech-
nology to be used or on the number of possible scenarios a bidder
could propose. The supplier of the existing network, First Data
Resources, was the winning bidder and provided two proposals that
continued the existing online network and implemented the CDROM
solution.

The CDROM proposal was chosen primarily on economics, even with
the winning bidder already having the telecommunications network
and terminal equipment already in place. Payback is estimated at
twelve months.

The workstation consists of a Telex 1280 AT compatible CPU, 4.0Mb RAM memory and a Hitachi 1503S CDROM drive. The CDROM discs are updated monthly.

Greg Smith, Meridian Data, Inc.

Greg discussed Meridian Data's recent announcement of its CD-Net and CD-Server products that permit the use of CDROM drives on PC local area networks.

CD-Net is supported on Ethernet, Token Ring and ARCnet hardware systems. With a capacity of one to three CDROM drives, the product is driven by a 8088 CPU with 512KB RAM memory. Connection is by a SCSI interface. A 40Mb hard drive is optional. Both High Sierra and ISO9660 support is provided.

Access speeds are equal to or greater than a single user drive.

The product accepts multiple copies of the same CDROM disc. Up to seven CD-Nets are supported on a single network.

Cost is $2,995 and includes one CDROM drive along with the appropriate software.

Mark Galloway, Mike Clark, Nimbus Records

Mark and Mike made a presentation on the recent support by the Nimbus mastering facility in Charlottsville, Va of CDROM manufacturing. Included was a video taped tour of the manufacturing process along with a demonstration of a CDROM catalog of Nimbus Records' classical CD-Audio discs.

Mark provided a business reply card to send in to receive a copy of the CDROM catalog disc as well as an Agricultural Extension disc developed with the Virginia Cooperative Extension Service.

Jeff DeTray, CDROM Review

Jeff spoke about their recent announcement of the CDROM Continuous Information Service. Providing a monthly newsletter, the service will provide up to the minute reporting of the CDROM industry. In addition, it will provide a quarterly laboratory evaluation of released CDROM products, both hardware and application products. Membership to the Service will be limited so as to provide the best possible service.

Chris Andrews, Hewlett Packard Corporation

Chris reviewed HP's entry into the CDROM industry with its LaserROM product that provides HP3000 documentation on two CDROM discs.

The driving force behind the project was a desire to increase the quality of the volumes of information being provided to the cus-

tomer in the documentation associated with its computer systems.

He provided some statistics of HP's documentation in 1987:

    1,110,000 pages

    7,900 manuals (1,700 new manuals in 1987)

    3,000,000 copies printed

Costs for the prototype were:

    Internal data preparation $40,000
    External data preparation   30,000
    Retrieval software   2,500
    Mastering/Replication   3,500
    Six Replications   150
                                  ========
                                   $76,150

The prototype contained a variety of documentation types:

    Service notes
    Directories
    Policies and Procedures
    Application notes
    Software manuals

As part of the project, it was decided to standardize on SGML as
the markup language.

The product is now updated monthly and incorporates approximately
10% of the manual set.

Chris Pooley, Silver Platter

Chris discussed SilverPlatter's recent announcement of the GPO
monthly catalog on CDROM.   Available at a prepublication cost of
$750.00 until May 31, 1988, after which the cost goes to $950.00.

Chris then demonstrated SilverPlatter's ERIC release with the up-
dated V1.4 of their retrieval software.

Mary Marshall, OCLC (Online Computer Library Center)

Mary presented OCLC's search engine Search CD450 and discussed
OCLC's role in the library industry.   With over 7,000 member
libraries, their major role is to provide cataloging support. As
part of their charter to provide higher levels of service at
lower or even costs, they are moving to CDROM as a means of in-
formation distribution.

They are currently working on three major projects:

Catalog CD450, which will be in field test this summer, will
provide the online cataloging database on CDROM.

CD2000, which is a public access catalog.

Graphtext, which is a search engine for combined graphics and textual information.

OCLC also will be releasing V2.0 of the Search CD450 retrieval package in the near future.

Mary then demonstrated "Computers", which is a database dealing with computers and technology extracted from OCLC's full 17 million record database.

Gerry McFaul then closed the meeting by announcing that the next meeting with probably be Wednesday, June 8.

            Hitachi CDR1503S Hardware Command Summary
            ===

    Command [Bits of 1st byte]

0 RESET [0000 0000]

        1 SEEK (Data) [0001 x0xx]   (Pause at Current position)
           (Stop at home position)   (Pause at start, 0,0,0)
                    (Seek and pause, min,sec,blk)

        2 READ (Data) [0010 x0xx]   (Current block)
           (Auto increment block)   (Single block read)
                       (Read min,sec,blk)

        3 DRIVE CONTROL [0011 0000]   (Eject disc/tray)
           (Close tray - CDR1503S)   (Read Drive ID - 52 bytes ret)

        4 SLOW READ [0100 00xx]   (Single block, min,sec,blk)
                       (Auto increment block)

        5 Q-CODE READ [0101 0000]   (Drive sends 10 bytes)

        6 DRIVE READ [0110 0000]   (Drive sends 1 byte)

        7 CONTROLLER READ [0111 0000] (Drive sends 1 byte)

        8 RESERVED

        9 SET POWER SAVE [1001 0000]   (Set 0-20 mins)

       10 LOCK/UNLOCK/LSTATUS READ [1010 x00x]
            (Set lock)   (Clear lock)   (Return lock status)

       11 RESERVED

       12 SEEK TO LEAD-IN [1100 0000]
          (Toc area play - must read Q-Code while in process)

       13 RESERVED

```
    14 AUDIO PLAY [1110 x0xx]
       (Play by start, end track number)
       (Play by start min,sec,blk, end min,sec,blk)
       (Mute/unmute left/right when play used, Bit1=L Bit0=R 1=mute)

    15 CLEAR COMMAND COUNTER [1111 1111]
```

                              SHADOW

                       From: ANTIC SOFTWARE

Here is a list of features present in the NEW Antic software named SHADOW.

This program is brought to you by the makers of DC Formatter, the guys
from Double Click Software.

SHADOW performs all file transfers in the background! That is 100% in the
background. You will NEVER EVER notice a system slowdown when using
SHADOW.

SHADOW can be used during any .PRG, .TOS, or .TTP program.

Supported file transfer protocols include (ALL in background!):
X-MODEM Checksum   X-MODEM CRC   X-MODEM CRC 1K
Y-MODEM batch   B Protocol   B+ protocol   ASCII

SHADOW has a built in background auto-dialer which is 100% compatible with
FLASH dial directories. The dialer will continue to work until connected,
from .PRG, .TOS, and .TTP programs.

Also, SHADOW has a built-in VT-52 emulator that is accessible from any GEM
program, and all SHADOW functions are available from the terminal.

SHADOW also includes an (optional) reset-proof RAMdisk.

SHADOW can detect baud rate changes from other programs (and thus maintain
the current settings).

SHADOW has an on-screen block count which you can toggle on or off, and
stays present during any programs execution.

And probably the most significant feature of SHADOW is the ability to
press the RESET button, and NOT stop the file transfer. That's right,
you can press the reset button, watch the computer warm boot, and also
keep the file transfer going. This feature really works!!! It is 100%
security for file transfers. And you don't need SHADOW on both ends to
have this feature!

You can also change resolutions or monitors without affecting your
transfer! Also, SHADOW provides programmers access to its routines.

FLASH has been upgraded to access SHADOW (thus allowing background file
transfer from within FLASH). UniTerm, from Simon Poole in Switzerland,
will soon have direct access as well.

The desk accessory allows access to SHADOW from within any GEM program,
and once started, it will continue to work from any program. And all
options in the desk accessory are accessible through key strokes.

We include 68000 assembly, 'C', and GFA BASIC bindings to SHADOW so you
can add access to any of your programs right away.

We have literally tried hundreds of different programs in testing SHADOW,
and have only come up with a handful of programs which will not work with
SHADOW. And even some BOOT disk games work with SHADOW! Here is a small
sample of programs that DO work with SHADOW:

Tempus	Marble Madness	Laser C	Publishing Partner
First Word	Word Perfect	VIP	CAD 3D 1.0, 2.0
Cyber Paint	Macro Mouse	Flash 1.6	ST Talk Pro (Demo)
InterLink ST	MiTerm	PC Intercomm	Drafix CAD
Word Writer	Degas, Degas Elite	NEO	ST Writer
Shanghai	NeoDesk	Kuma Products	You name it!

You can now free up your computer download time!

Also included is a free membership and $15 free CompuServe time, and a
free upgrade to FLASH 1.6!

                         Michael B. Vederman and Paul W. Lee
                              Double Click Software

                         C PROGRAMMING LANGUAGE
                         ======================

BY T."Rex" Reade

The computing world has undergone a revolution since the introduction of
the C programming language in 1978. Big computers are much larger and
personal computers have capabilities that rival the mainframes of a decade
ago. During this time, C has changed too, it has spread far beyond it's
origins as the language of the UNIX operating systems.

The rise in popularity, the changes in C, and the creation of compilers by
groups not involved in it's design combined to show a need for a more
contemporary defination of the language. In 1983, the American National
Standards Institute (ANSI) established a committee whose goal was to
produce a machine independent defination of the language. The result is
the ANSI standard for C.

The standard provides a new form of function declaration that permits
cross-checking of definition where use and emphasis is placed on structure
assignment and enumerations. There is a standard library, with an
extensive set of functions for performing input and output, memory
management, string manipulation and similar tasks. It makes precise
the behavior of features that were not spelled out in the original
definition, and at the same time states which aspects of the language
remain machine dependent.

C is a general purpose language which features economy of expression,
modern control flow and data structures and a superb set of operators.
C is not a high level language nor is it a big language and it is
not specialized to any particular area of application. However, the
absence of restrictions and it's generality make it more convenient for
many tasks, more so than the so called high powered languages.

In the coming weeks we will attempt to show just how easy the language is
to learn and put to use. We will be referencing a number of the "C"
language programs available, we found the folks at MEGAMAX and MARK
WILLIAMS CO.to be most cooperative with our project and have requests
placed with the other "C" language software publishers to participate.
We hope this series of articles will help you enhance your programming
abilities, and encourage others who have been considering programming to
take a long hard look at "C" and the software we will be using during
this entire project.

- R   E   V   O   L   V   E R -

                      From: INTERSECT   Software

              THERE HAS NEVER BEEN A WAY TO CHEAT TIME UNTIL NOW!

REVOLVER is an essential program that will increase your
productivity and give you peace of mind at the same time.

REVOLVER can take a program (TOS, GEM, TTP) and stop it at any
point then write it to disk, allowing you to continue where you
left off at a later time! It does this by taking a picture of the
entire computer's memory and saving it as a file on a RAM DISK,
FLOPPY DISK, or HARD DISK. You can also set a timer to save your
program at specified intervals protecting you from a possible data
disaster.

REVOLVER is not a desk accessory and is therefore active at all
times, even within TOS environments. The "Roll out" and "Roll in"
capabilities supply a much needed convenience to the user allowing
him to effectively swap back and forth between applications at any
time. Because disk is the storage medium for "Rolled out" programs
there is no limit to the number of "Swapped" programs and, once
"Rolled out" a program can be "Swapped" back in, even after a cold
boot!

HERE ARE SOME SCENARIOS:

- You're in the middle of a large spreadsheet and you find that
  you need some information from your data base. Simply activate
  REVOLVER and "Roll out" your spreadsheet, and "Roll in" your
  data base. When you are done "Roll in" your spreadsheet and
  continue at the very point where you left off!

- While playing a game without "continuation" capabilities you
  decide to quit, but you would like to save your place for the
  next time you play. Let REVOLVER handle it for you.

- Applications that require a long load and set-up time can be
  blasted in quickly. Since REVOLVER takes a picture of   the
  computer's entire memory it can "Roll it in" in a matter of
  seconds.

REVOLVER Features:

* "Roll in" and "Roll out" programs.
* Timed saves, for protection against power failures or crashes.
* Full disk commands with wild cards
* VT-52 Emulator
* Control Panel options
* Snapshot screen to a .NEO file
* Works with any program (TOS,GEM,TTP)
* and more...

                    Call us for more exciting details.

                      1-800-826-0130 Toll Free.
                      1-813-923-8774 in Florida.